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| 10/062,431 | 01/30/2002 | James L. Winkler | 018547-035530US | 3558 |

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| EXAMINER |
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SORKIN, DAVID L

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| ART UNIT | PAPER NUMBER |
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1723

DATE MAILED: 04/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/062,431

Applicant(s)

WINKLER ET AL.

Examiner

David L. Sorkin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 41-50, 64 and 65 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 41-50, 64 and 65 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. New claims 51 and 52 have been renumbered 64 and 65 respectively to place them in compliance with 37 CFR 1.126, which requires that "[w]hen claims are added, they must be numbered by the applicant consecutively beginning with the number next following the highest numbered claim previously presented (whether entered or not)".
2. Claims 41 and 64 are objected to as failing to comply with 37 CFR 1.75(d)(1), which requires that "[t]he claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description". Claim 41 recites a "holding device" comprising three structural element subsets, "a body", "a pair of end members" and "one or more walls". In contrast, the description uses the term "body 12" to refer to a structure which comprises the end members (22, 24) and walls (16, 18, 20). Applicant is required to rephrase claim 41 to be consistent with the remainder of the specification in that the end members and walls are elements of the body, rather than elements in combination with the body. Claim 64 must be analogously rephrased. Also, claim 41 is objected to because the term "non-removably coupling" has no antecedent basis in the description.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 41-50, 64 and 65 are rejected under 35 U.S.C. 102(b) as being anticipated by Griner et al. (US 5,266,272). Regarding claim 41, Griner ('272) discloses a holding device (14) comprising a body comprising a pair of end members (the top and bottom walls of 14 as seen in Fig. 9); and one or more walls (the side walls of 14 as seen in Fig. 9) extending between the end members, and wherein said walls comprise at least one non-removable coupling member (212,214,216). The device is capable of being used in the manner discussed in claim 41, including being rotated about an axis from which the end members extend, and which is parallel to the walls, and the coupling members are capable of coupling a object (such as container 12) so that it is perpendicular to the rotational axis (see Fig. 9). Note: it is considered that claim 42 requires a "container" and "a holding device", in combination. Regarding the phrase "containing a polymer array and a fluid", "[e]xpressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim" *Ex parte Thilbault*, 164 USPQ 666, 667 (Bd. App. 1969). Furthermore, "[i]nclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims", *In re Otto*, 136 USPQ 458, 459 (CCPA). Regarding claim 42, Griner ('272) discloses a system comprising a container

(12); and a holding device (14) comprising a body having a rotational axis, a pair of end members (the top and bottom walls of 14 as seen in Fig. 9) extending from the axis, and one or more walls extending between the end members parallel to the axis (the side walls of 14 as seen in Fig. 9) and at least one coupling member (212,214,216) to couple the container to the wall. While it is understood that the container is being claimed, but not the intended contents of the container, as discussed above, for the record, the reference discloses the intended contents being liquid samples of microorganisms (see col. 4, lines 21-36); therefore the container "contains a polymer array and a fluid", because microorganisms necessarily including an array of polymers including DNA, proteins/polypeptides and polysaccharides. Regarding claim 43, the container defines a chamber including a pair of closely spaced apart faces (86 and 88) that are separated by walls to define a narrow interior, wherein one of the faces (86) defines a planar surface (see Fig. 7A). Regarding claim 44, the walls of the chamber are set at angles sufficient to agitate fluid when rotated (see Fig. 9). Claims 45 and 46 fail to further structurally limit the claimed apparatus. Regarding claim 47, the end members are perpendicular to the walls (see Fig. 9). Regarding claim 48, the coupling members comprise a pair of rails fixedly attached to the walls to form a slot for the container (see Fig. 9). Regarding claim 49, the rails are perpendicular to the walls (see Fig. 9). Regarding claim 50, the system further comprises an oven, wherein the holding device is rotatably disposed in the oven (see col. 5, lines 1-8, and Fig. 4). Regarding claim 64, Griner ('272) discloses a holding device (14) comprising a body comprising a pair of end members (the top and bottom walls of 14 as seen in Fig. 9); one or more walls (the side

walls of 14 as seen in Fig. 9) extending between the end members; at least one coupling member (212,214,216) form in one of the walls. The device is capable of being used in the manner discussed in claim 64, including the body being rotated about an axis from which the end members extend, and which is parallel to the walls, and the coupling members are capable of coupling an object (such as container 12) so that it is perpendicular to the rotational axis (see Fig. 9). Regarding claim 65, the coupling member comprises an elongated slot formed within the side wall (see Fig. 9).

5. Claims 41 and 64 are rejected under 35 U.S.C. 102(e) as being anticipated by Pakeriasamy (US 5,857,573). Regarding claim 41, Pakeriasamy ('573) discloses a holding device comprising a body comprising a pair of end members ("opposed end walls 28", see col. 3, lines 24-29); and one or more walls (26a, 26b) extending between the end members, and wherein said walls comprise at least one non-removable coupling member (the "vertical slots" 36a and 36b or the ribs 34a and 34b defining the slots). The device is capable of being used in the manner discussed in claim 41, including being rotated about an axis from which the end members extend, and which is parallel to the walls, and the coupling members are capable of coupling an object so that it is perpendicular to the rotational axis (see Fig. 2). Regarding claim 64, Pakeriasamy ('573) discloses a holding device comprising a body comprising a pair of end members ("opposed end walls 28", see col. 3, lines 24-29); one or more walls (26a, 26b) extending between the end members; at least one coupling member (the "vertical slots" 36a and 36b) form in one of the walls. The device is capable of being used in the manner discussed in claim 64, including the body being rotated about an axis from

which the end members extend, and which is parallel to the walls, and the coupling members are capable of coupling an object so that it is perpendicular to the rotational axis (see Fig. 2).

6. Claims 41 and 64 are rejected under 35 U.S.C. 102(b) as being anticipated by Nicholson (US 689,213). Regarding claim 41, Nicholson ('213) discloses a holding device comprising a body comprising a pair of end members (b,b'); and one or more walls (b²) extending between the end members, and wherein said walls comprise at least one non-removable coupling member (b⁴). The device is capable of being used in the manner discussed in claim 41, including being rotated about an axis from which the end members extend, and which is parallel to the walls, and the coupling members are capable of coupling an object so that it is perpendicular to the rotational axis (see Fig. 4). Regarding claim 64, Nicholson ('213) discloses a holding device comprising a body comprising a pair of end members (b,b'); one or more walls (b²) extending between the end members; at least one coupling member (b⁴) form in one of the walls. The device is capable of being used in the manner discussed in claim 64, including the body being rotated about an axis from which the end members extend, and which is parallel to the walls, and the coupling members are capable of coupling an object so that it is perpendicular to the rotational axis (see Fig. 2).

7. Claims 42-47 are rejected under 35 U.S.C. 102(b) as being anticipated by Wells (US 423,362). Note: it is considered that claim 42 requires a "container" and "a holding device", in combination. Regarding the phrase "containing a polymer array and a fluid", "[e]xpressions relating the apparatus to contents thereof during an intended operation

are of no significance in determining patentability of the apparatus claim" *Ex parte Thilbault*, supra. Furthermore, "[i]nclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims", *In re Otto*, supra. Regarding claim 42, Wells ('362) discloses a system comprising a container (B,C); and a holding device comprising a body (A) having a rotational axis, a pair of end members extending from the axis, and one or more walls extending between the end members parallel to the axis (see Fig. 2) and at least one coupling member (E, B') to couple the container to the wall. While it is understood that the container is being claimed, but not the intended contents of the container, as discussed above, for the record, the reference fully discloses the intended contents being milk (see page 1, lines 9-19) which is a mixture of a fluid (water) and an array of polymers (including proteins/polyaminoacids). Regarding claim 43, the container defines a chamber including a pair of closely spaced apart faces (C and the closed end of B) that are separated by walls (the side walls of B) to define a narrow interior, wherein one of the faces (C) defines a planar surface. Regarding claim 44, the walls of the chamber are set at angles sufficient to agitate fluid when rotated (see Fig. 2). Claims 45 and 46 fail to further structurally limit the claimed apparatus. Regarding claim 47, the end members are perpendicular to the walls (see Fig. 2).

8. Claims 42 and 45-49 are rejected under 35 U.S.C. 102(b) as being anticipated by Shumway (US 493,046). Note: it is considered that claim 42 requires a "container" and "a holding device", in combination. Regarding the phrase "containing a polymer array and a fluid", "[e]xpressions relating the apparatus to contents thereof during an intended

operation are of no significance in determining patentability of the apparatus claim" *Ex parte Thilbault*, supra. Furthermore, "[i]nclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims" *In re Otto*, supra. Regarding claim 42, Shumway (US 493,046) discloses a system comprising a container (see page 1, lines 44-47, Fig. 2); and a holding device comprising a body having a rotational axis, a pair of end members (B) extending from the axis, and one or more walls (A,C,D) extending between the end members parallel to the axis (see Fig. 2); at least one coupling member (see page 1, lines 44-47, Fig. 2). Claims 45 and 46 fail to further structurally limit the claimed apparatus. Regarding claim 47, the end members are perpendicular to the walls (see Figs. 1 and 2). Regarding claim 48, the coupling members comprise a pair of rails fixedly attached to the walls to form a slot for the container (see Fig. 2). Regarding claim 49, the rails are perpendicular to the walls (see Fig. 2).

9. Claims 42 and 45-47 are rejected under 35 U.S.C. 102(b) as being anticipated by Neuner et al. (US 4,329,068). Note: it is considered that claim 42 requires a "container" and "a holding device", in combination. Regarding the phrase "containing a polymer array and a fluid", "[e]xpressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim" *Ex parte Thilbault*, supra. Furthermore, "[i]nclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims" *In re Otto*, supra. Regarding claim 42, Neuner ('068) discloses a system comprising a container (12); and a holding device comprising a body having a rotational axis, a pair of end

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members (32) extending from the axis, and one or more walls (34) extending between the end members parallel to the axis (see Figs. 1-3); at least one coupling member (for example, 14 or 30). Claims 45 and 46 fail to further structurally limit the claimed apparatus. Regarding claim 47, the end members are perpendicular to the walls (see Figs. 1 and 2).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over Neuner et al. (US 4,329,068) in view of Reynolds et al. (US 5,753,187). The holding device of Neuner ('068) discussed above with regard to claim 42, while rotatable disposed, is not disposed in an oven. Reynolds ('187) explains that is known to dispose rotatable holding devices in an oven for the purpose of controlling temperature of chemical and biological experiments (see col. 1, lines 11-35). It is considered that it would have been obvious to one of ordinary skill in the art to have disposed the device of Neuner ('068) in an oven to control the temperature of chemical experiments as taught by Reynolds ('187), col. 1, lines 11-35.

Response to Arguments

12. Applicant has amended claim 41 to further limit the claimed wall(s) and coupling members. Applicant's arguments regarding claim 41 are moot in view of the new grounds for rejection.

13. Applicant's arguments regarding claim 42 are unclear. Applicant states with regard to each applied reference, the references do not disclose "any polymer array container". While the examiner has indicated for each reference what structural element is considered to be the claimed container, in no case has applicant explained why applicant considers the containers of the reference not to meet the limitations of the claimed container. Furthermore, by using the phrase "polymer array container" in applicant's arguments, rather than referring to the actual language of the claim, applicant does not set forth a clear position. The actual language of the claim is "container containing a polymer array and a fluid". Applicant is advised that "[e]xpressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim" *Ex parte Thilbault*, supra. Furthermore, "[i]nclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims" *In re Otto*, supra.

Conclusion

14. Applicant's information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on 10 February 2003 and amendment filed 10 February 2003 necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP §§ 706.07(a) and

§ 609(B)(2)(i). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David L. Sorkin whose telephone number is 703-308-1121. The examiner can normally be reached on 8:00 -5:30 Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 703-308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

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A handwritten signature in cursive script, appearing to read "David Sorkin".

David Sorkin

April 25, 2003

A handwritten signature in cursive script, appearing to read "Charles Cooley".

CHARLES E. COOLEY
PRIMARY EXAMINER